Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (original): A composition of matter having a formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-X-Y$$

wherein x is an integer of about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

Claim 2 (original): The composition of matter of claim 1 wherein x is about 581.

Claim 3 (original): The composition of matter of claim 1 wherein X is -O-CO-.

Claim 4 (original): The composition of matter of claim 1 wherein Y is a cholesterol residue.

Claim 5 (original): The composition of matter of claim 1 wherein Y is a member selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α -ergostenol, β -ergostenol, γ -

ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3β) -7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α_i -sitosterol, β -sitosterol, γ -sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

Claim 6 (original): A composition of matter having a formula represented by

wherein x is an integer of about 8 to about 1,200, and Y is a cholesterol residue.

Claim 7 (original): The composition of matter of claim 6 wherein x is about 581.

Claim 8 (original): A composition of matter having a formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-CH_2-N-(CH_2-CH_2-NH)_y-CH_2-OH$$

wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

Claim 9 (original): The composition of matter of claim 8 wherein x + y is about 581.

Claim 10 (original): The composition of matter of claim 8 wherein X is -CO-.

Claim 11 (original): The composition of matter of claim 8 wherein Y is a cholesterol residue.

Claim 12 (original): The composition of matter of claim 8 wherein Y is a member selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, ergostanol, α-ergostenol, β-ergostenol, epicholesterol, ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3β) -7-dehydrocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, allocholesterol, campesterol, α_1 -sitosterol, β -sitosterol, γ -sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, necergosterol, and dehydroergosterol.

Claim 13 (original): A composition of matter having a formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-CH_2-N-(CH_2-CH_2-NH)_y-CH_2-OH$$

$$CO$$

$$V$$

wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, and Y is a cholesterol residue.

Claim 14 (original): The composition of matter of claim 13 wherein x + y is about 581.

Claim 15 (original): A composition of matter having a formula represented by

$$H_3C-NH-(CH_2-CH_2-NH)_x-CH_2-CH_2-N-(CH_2-CH_2-NH)_y-CH_2-X_1-Y_1$$
 X_2
 Y_2

wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, X_1 and X_2 are linkers, and Y_1 and Y_2 are residues of a storol comprising a 3-ol group.

Claim 16 (original): The composition of matter of claim 15 wherein x + y is about 581.

Claim 17 (original): The composition of matter of claim 15 wherein X_1 is -O-CO- and X_2 is -CO-.

Claim 18 (original): The composition of matter of claim 15 wherein Y_1 and Y_2 are cholesterol residues.

Claim 19 (original): The composition of matter of claim 15 wherein Y_1 and Y_2 are members independently selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α -ergostenol, β -ergostenol, γ -ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3β) -7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α_1 -sitosterol, β -sitosterol, γ -sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

Claim 20 (original): A composition of matter having a formula represented by

wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, and Y is a cholesterol residue.

Claim 21 (original): A complex comprising a mixture of a nucleic acid and a composition of matter having a formula represented by

$$H_1C-NH-(CH_2-CH_2-NH)_x-CH_2-X-Y$$

wherein x is an integer of about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

Claim 22 (original): The complex of claim 21 wherein x is about 581.

Claim 23 (original): The complex of claim 21 wherein X is -O-CO-.

Claim 24 (original): The complex of claim 21 wherein Y is a cholesterol residue.

Claim 25 (original): The complex of claim 21 wherein X is -O-CO- and Y is a cholesterol residue.

The complex of claim 21 wherein Y is Claim 26 (original): a member selected from the group consisting of residues of epicholestanol, coprosterol, cholesterol. cholestanol, β-ergostenol, α-ergostenol, epicholesterol, ergostanol, ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3β)-7-dehydrocholesterol, desmosterol, 24-hydroxycholesterol, 25-hydroxycholesterol, allocholesterol, campesterol, α_1 -sitosterol, β -sitosterol, γ -sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

Claim 27 (original): The complex of claim 21 wherein the nucleic acid comprises a plasmid.

Claim 28 (original): A complex comprising a mixture of a nucleic acid and a composition of matter having a formula represented by:

wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

Claim 29 (original): The complex of claim 28 wherein x + y is about 581.

Claim 30 (original): The complex of claim 28 wherein X is -CO-.

Claim 31 (original): The complex of claim 28 wherein Y is a cholesterol residue.

Claim 32 (original): The complex of claim 28 wherein X is -CO- and Y is a cholesterol residue.

Claim 33 (original): The complex of claim 28 wherein Y is a member selected from the group consisting of residues of coprosterol, epicholestanol, cholestanol, cholesterol, α-ergostenol, β-ergostenol, epicholesterol, ergostanol, ergostenol, ergosterol, 22,23-dihydroergosterol, stigmastanol, (3β)-7-dehydrocholesterol, desmosterol, 24-hydroxycholesterol, 25-hydroxycholesterol, allocholesterol, campesterol, α ,-sitosterol, β -sitosterol, γ -sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, necergosterol, and dehydroergosterol.

Claim 34 (original): The complex of claim 28 wherein the nucleic acid comprises a plasmid.

Claim 34 35 (currently amended): A complex comprising a mixture of a nucleic acid and a composition of matter having a formula represented by

$$H_{3}C-NH-(CH_{2}-CH_{2}-NH)_{x}-CH_{2}-CH_{3}-N-(CH_{2}-CH_{2}-NH)_{y}-CH_{2}-X_{1}-Y_{1}$$

wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, X_1 and X_2 are linkers, and Y_1 and Y_2 are residues of a sterol comprising a 3-ol group.

Claim 35 36 (currently amended): The complex of claim 34 35 wherein x + y is about 581.

Claim 36 37 (currently amended): The complex of claim 34 35 wherein X_1 is -O-CO- and X_2 is -CO-.

Claim 37 38 (currently amended): The complex of claim 34 35 wherein Y_1 and Y_2 are cholesterol residues.

Claim $\frac{38}{39}$ (currently amended): The complex of claim $\frac{34}{35}$ wherein X_1 is -O-CO-, X_2 is -CO-, and Y_1 and Y_2 are cholesterol residues.

Claim 39 40 (currently amended): The complex of claim 34 35 wherein Y₁ and Y₂ are members independently selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α -ergostenol, β -ergostenol, γ -ergostenol, ergosterol, α -ergosterol, stigmasterol, stigmasterol, ergosterol, α -dehydrocholesterol, desmosterol, allocholesterol, α -sitosterol, α -sitosterol, α -sitosterol, α -sitosterol, α -sitosterol, α -sitosterol, α -sitosterol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

Claim 40 53 (currently amended): The complex of claim 34 35 wherein the nucleic acid comprises a plasmid.

Claims 41-52 (canceled)